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ORIGINAL

AZ CORP COMMISSION DOCKET CONTROL

BID PROPOSAL ARSENIC REMOVAL SYSTEM FOR Lake Verde Water Co.

Docket No W-01557A-15-0079 W-01557A-15-0080

Arizona Corporation Commission DOCKETED

MAY 2 8 2015

DOCKETED BY



Date 5/4/2015

RE: COST SHEET QUOTE # WELL

Equipment Cost	\$ 16,500	
Delivery/Installation	\$ 3,500	
Equipment Design Engineering	\$ 3,500	
TOTAL EQUIPMENT COST		\$ 23,500
ADEQ Permit Fee		\$ 1,500
Media/Freight Cost (cu.	\$ 4,000	
Installation/backwash	\$ 1,000	
TOTAL MEDIA COST		\$ 5,000
TOTAL DDO IFOT COST		0.20.000
TOTAL PROJECT COST		\$ 30,000

TERMS AND CONDITIONS

Total Equipment Cost		\$	23,500
Initial Payment ADEQ Permit Fee	60 % Due at signing of contract Due at signing of contract	\$ \$	14,100 1,500
Total	Due at signing of contract	\$	15,600
Second (2 nd) Pymt.	30 % Due upon System Delivery	\$	7,050
Final Payment	10 % Due 30 days backwashing	\$	2,350
Media Payment	100 % Due upon System Delivery	\$	5,000
Total Project cost		\$	30,000

Quoted Terms – This pricing is valid until June 30, 2015.

<u>Transportation Liability</u> – Global Water Renewal, LLC is responsible for transportation and any damage during the delivery process. FOB is to Well Site.

DESIGN CRITERIA	
	WELL LOCATION
Tank Size	42" by 72 "
Number of tanks	1
Pipe Size	2 inch
Media Column Height	36"
GPM/ft² surface area	8.1
Empty Bed Contact Time	3 minutes
Cubic Feet Media per Tank	10
Total Well Head Flow	50 GPM
Years to reach 8 ppb	
Treated Flow	
By-pass Flow	

Arsenic (V)	1.3 PPB
Arsenic III)	1.4 PPB
Vanadium	
pH	
Silica	
Well-head flow	50 GPM / @ 33% Duty Cycle
Piping size	2 inch
System inside or outside	Inside



Graver Technologies

200 Lake Drive, Glasgow, DE 19702 800.249.1990

MetSorb® HMRG System Sizing and Media Performance Estimation

Date: May 27, 2015 Company: **GEcom Water Solutions Contact Name:** Wavne Selness LVWC **System Location: Well Production Information** Max Pump or Design Flow Rate (GPM) **50 GPM** Gallons per Day (GPD) 36,000 GPD **Total Annual Production (GPY):** 13,140,000 GPY **Water Quality Information** pH: 7.70 Total Arsenic: 22 μg/l Arsenic III: <1.0 μg/l (Assumption) Silica: mg/l Elevated 36.9 Iron: <0.05 mg/l Manganese: < 0.05 mg/l Alkalinity -Total 328 mg/l Total Hardness: 473 mg/l (as CaCO₃) Vanadium: < 0.002 mg/l (Assumption) Phosphate: < 0.15 mg/l TOC: <1 mg/l Turbidity: 1.07 NTU Recommendations: **Empty Bed Contact Time:** 3.14 Minutes @ 50 gpm Ft3 MetSorb Media: 21 ft³ Tank size: 42" X 72" Vessels

Assumptions / Recommendations:

Number of Tanks: Estimated Bed Volumes:

- Arsenic is present exclusively as arsenic +5.
- No other contaminants present to reduce adsorption capacity.

Estimated Gallons Prior to Media Replacement:

Estimated performance is based upon customer supplied water analysis. Actual media performance may vary as a result of site specific conditions and the presence of contaminants not represented in the data provided. This is not intended to be a guarantee of PERFORMANCE. Ongoing testing is necessary to identify any change in water supply which might affect the life of the media.

43,500 Bed Volumes

6,832,980 gallons